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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/029,365	12/20/2001	William Henry Harrison	13DV13906	13DV13906 4330	
6111	7590 06/12/2003				
GENERAL ELECTRIC COMPANY			EXAMINER		
ANDREW C GE AIRCRAI	FT ENGINES		SHEEHAN, JOHN P		
ONE NEUMANN WAY M/D H17 CINCINNATI, OH 452156301			ART UNIT	PAPER NUMBER	
	•		1742		
	•		DATE MAILED: 06/12/2003	1	

Please find below and/or attached an Office communication concerning this application or proceeding.

		IN				
	Application No.	Applicant(s)				
	10/029,365	HARRISON ET AL.				
Office Action Summary	Examiner	Art Unit				
•	John P. Sheehan	1742				
The MAILING DATE of this communication appears on the cover sheat twith the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on	<u> </u>					
2a)☐ This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-21 is/are pending in the application.						
4a) Of the above claim(s) <u>19 and 20</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,2,4-18 and 21</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) <u>1-21</u> are subject to restriction and/or election requirement.  Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)□ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2	5) Notice of Informal	ry (PTO-413) Paper No(s) Patent Application (PTO-152)				

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### **DETAILED ACTION**

#### Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1 to 18 and 21, drawn to a heat treatment process for restoring the properties of an aircraft engine having an INCONEL 718 cast portion, classified in class 148, subclass 675.
  - II. Claims 19 and 20, drawn to a an aircraft engine frame comprising a cast INCONEL 718 portion, classified in class 148, subclass 426+.

The inventions are distinct, each from the other because of the following reasons:

2. The inventions of Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as welding the cracks followed by stress relief heat treatment. While it is noted that claims 19 and 20 are product-by-process claims and incorporate the same process steps as described in process Group I, a product defined by the process by which it can be made is still a product claim (In re Bridgeford, 149 USPQ 55 (CCPA 1966)) and can be restricted from the process if the examiner can demonstrate that the product as claimed can be made

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by another materially different process such as the alternative process described above. See In re Brown, 173 U.S.P.Q 685, and In re Fessmann, 180 U.S.P.Q. 324, for analysis of weight given to process step recitations in product claims.

- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and because the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
- 4. During a telephone conversation with Mr. Carmen Santa Maria on May 29, 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1 to 18 and 21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19 and 21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### Specification

6. The use of the trademarks INCONEL 718, WASPALOY, INCOLOY 903, INCOLOY 907 and RENE 41 has been noted in this application. These trademarks

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should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

## Claim Rejections - 35 USC § 112

- 7. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 8. Claims 1, 2, 4 to 18 and 21 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The heating procedure recited in claim 3 is essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

In paragraph 0016 on page 5 of the specification, applicants disclose the process steps that the INCONEL 718 alloy "must undergo" (paragraph 0016, line 2) including the heating procedure recited in claim 3. It is the Examiner's position that, in view of the use of the phrase, "must undergo" in paragraph 0016 the subsequently disclosed process steps which include the heating procedure recited in claim 3 are essential to applicants' invention. However, claims 1, 2, 4 to 18 and 21 are silent in this regard. This rejection can be overcome by amending claim 1 to include the heating procedure now recited in applicants' claim 3.

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## Allowable Subject Matter

9. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter as recited in claim 3: None of the references alone or in combination teach or suggest a process for restoring properties of an aircraft engine article having an INCONEL 718 portion comprising:

heating the article in a non-oxidizing atmosphere at a rate to minimize distortion to a temperature in a range of about 975°F to about 1025°F and stabilizing the temperature of the article in this temperature range;

within 60 minutes of stabilizing the article in the temperature range of about 975°F to about 1025°F heating the article to a second temperature in the range of about 1950°F to about 2150°F;

holding the article at a temperature in the range of about 1950°F to about 2150°F for a time to fully solution precipitates;

cooling the article to a temperature in the range of about  $1000^{0}$ F to about  $1200^{0}$ F in a protective atmosphere at a rate sufficient to maintain dimensional stability while avoiding the formation of the  $\delta$  phase; and

cooling the article to room temperature.

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### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (703) 308-3861. The examiner can normally be reached on T-F (6:30-5:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

John P. Sheehan Primary Examiner Art Unit 1742

jps May 30, 2003